

+

PTO/SB/D&A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

| | | | |
|-------|---|----|---|
| Sheet | 1 | of | 2 |
|-------|---|----|---|

Complete if Known

| | |
|--------------------|------------|
| Application Number | 10/032,394 |
|--------------------|------------|

| | |
|--------------------|-------------------|
| Filing Date | December 19, 2001 |
|--------------------|-------------------|

| | |
|-----------------------------|-----------------------|
| First Named Inventor | Adityo Prakash |
|-----------------------------|-----------------------|

Group Art Unit 2613

| | |
|---------------|---------------|
| Examiner Name | not yet known |
|---------------|---------------|

Attorney Docket Number 10006.000610

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

**Examiner
Signature**

Date Considered

11/05/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.

AUG 08 2002
PATENT & TRADEMARK OFFICE

+

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

| | | | |
|-------|---|----|---|
| Sheet | 2 | of | 2 |
|-------|---|----|---|

Complete if Known

| | |
|-------------------------------|-------------------|
| Application Number | 10/032,394 |
| Filing Date | December 19, 2001 |
| First Named Inventor | Adityo Prakash |
| Group Art Unit | 2613 |
| Examiner Name | not yet known |
| Attorney Docket Number | 10006.000610 |

[illegible]

**Examiner
Signature**

Date
Considered

11/05/04

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Do not respond to a collection of information unless it contains a valid OMB control number.

Under the Paperwork Reduction Act of 1996 no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known

| | |
|-------------------------------|-------------------|
| Application Number | 10/032,394 |
| Filing Date | December 19, 2001 |
| First Named Inventor | Aditya Prakash |
| Group Art Unit | 2613 |
| Examiner Name | not yet known |
| Attorney Docket Number | 10006.000610 |

(use as many sheets as necessary)

| | | | |
|-------|---|----|---|
| Sheet | 1 | of | 2 |
|-------|---|----|---|

[illegible][illegible]

**Examiner
Signature**

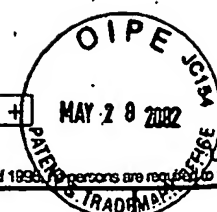
Date Considered

***EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box →



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 2

Complete if Known

| | |
|------------------------|-------------------|
| Application Number | 10/032,394 |
| Filing Date | December 19, 2000 |
| First Named Inventor | Adityo Prakash |
| Group Art Unit | 2613 |
| Examiner Name | not yet known |
| Attorney Docket Number | 10006.000610 |

RECEIVED
MAY 28 2002
Technology Center 2600

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

| Examiner Initials * | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
|---------------------|-----------------------|---|----------------|
| DPW | C | PETER J. BURT, et al., The Laplacian Pyramid as a Compact Image Code; April 1983, pgs. 532-540, Vol. COM-31; IEEE Transactions on Communications. | |
| DPW | D | AMIR SAID, et al., A New, Fast, and Efficient Image Codec Based on Set Partitioning in Hierarchical Trees; June 1996, pgs. 243-250, Vol. 6 No. 3; IEEE Transactions on Circuits and Systems for Video Technology. | |
| DPW | E | MICHAEL W. MARCELLIN, et al., Trellis Coded Quantization of Memoryless and Gauss-Markov Sources; January 1990, pgs. 82-93, Vol. 38 No. 1; IEEE Transactions on Communications. | |
| DPW | F | JEROME M. SHAPIRO, An Embedded Hierarchical Image Coder Using Zerotrees Of Wavelet Coefficients; pgs. January 1993, pgs. 214-223 The David Sarnoff Research Center, Princeton, N.J. | |
| DPW | G | THOMAS SIKORA, et al., Express Letters; June 1995, pgs. 254-258, Vol. 5 No. 3; IEEE Transactions on Circuits and Systems for Video Technology. | |
| DPW | H | ANDRE KAUP, Object-Based Texture Coding of Moving Video in MPEG-4; February 1998, pgs. 5-15, Vol. 9 No. 1; IEEE Transactions on Circuits and Systems for Video Technology. | |
| DPW | I | JIN LI, et al., Arbitrary Shape Wavelet Transforms with Phase Alignment; January 1998, pgs. 683-687; Digital Video, Sharp Laboratories of America, Camas, WA. | |
| DPW | J | RONALD R. COIFMAN, et al., Signal Processing and Compression with Wavelet Packets; 5 April 1990, pgs. 1-10; Numerical Algorithms Research Group, Yale University, Connecticut. | |
| DPW | K | WIM SWELDENS, The Lifting Scheme: A Custom-Design Construction of Biorthogonal Wavelets; Nov. 1994, revised Nov. 1995, pgs. 186-200; Article No. 0015; AT&T Bell Laboratories, Murray Hill, NJ. | |
| | L | WIM SWELDENS, Industrial Mathematics Initiative Research Report, pgs. 1-34; The University of South Carolina, Department of Mathematics, Carolina. | |
| | M | INGRID DAUBECHIES, Ten Lectures on Wavelets, Society For Industrial and Applied Mathematics, Philadelphia, Pennsylvania 1992. | |
| | N | MARK DE BERG, et al., Computational Geometry, Algorithms and Applications; Department of Computer Science, Utrecht University, The Netherlands; Pohang University of Science and Technology, South Korea. | |

Examiner Signature

[Signature]

Date

Considered

11/05/04

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.